even in the female, only exhibit one isolated white spot; the lower wings also being orange, with a uniform black border and no kidney-shaped patch, but with the base of the wings also blackish, a marginal series of buff spots, and the fringe opposite to these spots intersected with pure white.

In his 'Catalogue of Lepidoptera Heterocera' Walker again neglected to look up the original description, but blindly followed M. Guenée, although he indicated his belief that the Museum specimen was from West Africa.

In his 'Monograph of Ophideridæ' Mr. Moore again followed Walker, stating that *Ophideres* must be restricted to its type *O. princeps*, and adopting for *O. fullonica* the name *Othreis*, Hübner (which is, of course, synonymous with *Ophideres* if we admit that typical *O. princeps* is *O. fullonica*).

The *Ophideres princeps* of Guenée, Walker, and Moore thus remains without a generic or specific name, and may be called *Halastus intricatus*. We have it from Old Calabar, Sierra Leone, Ambriz, and the River Niger. The family must now be called Othreidæ.

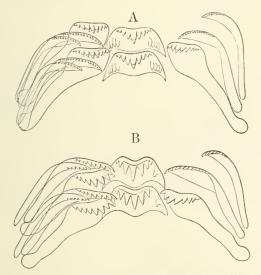
LVI.—On the Radula of Paludestrina Jenkinsi, Smith, and that of P. ventrosa, Mont. By B. B. WOODWARD, F.G.S., F.R.M.S.

WHEN in the autumn of 1889 my friend and colleague Mr. E. A. Smith had under observation the specimens of *Paludestrina* (=*Hydrobia*) to which he afterwards gave the name of *P. Jenkinsi*<sup>\*</sup>, he handed some examples to me with the request that I would examine the radula and compare it with that of *P. ventrosa*, Mont. At that time these two species were thought to be very closely allied, and, indeed, with some it was a disputed point, since conceded, whether *P. Jenkinsi* were anything more than a variety of *P. ventrosa*.

Pressure of work at the time, followed by prolonged illhealth, prevented the completion of the investigation, or all doubts as to the specific distinctness of the two forms might speedily have been set at rest, as the accompanying notes and descriptions will serve to show.

At the very first glance a dissimilarity in character is

\* Journ. Conch. vi. (1889) p. 142; figured in 'Essex Naturalist,' iv. p. 214. evident. The transverse rows of teeth are slightly more arched in P. ventrosa than they are in P. Jenkinsi; in the former, moreover, the admedian teeth alternate with and project slightly between the central ones, whereas in the latter they are nearly in a line with, and stand clear of, the median teeth, so that the whole radula has the appearance of being more sharply divided into longitudinal areas. The contrast between the respective median teeth is yet greater. In P. ventrosa the central cusp of the rachidian is as long as half the width of the tooth, and is flanked on either side by three others, whilst the single basal denticle on each side is barely visible; in P. Jenkinsi, on the other hand, the length of the central cusp is not more than one third the width of the whole tooth; four or even five minor cusps flank this central one to right and left of it, and four basal denticles stand out conspicuously on either hand below the crest of the tooth.



Portion of Radula of :- A. Paludestrina Jenkinsi, Smith B. Paludestrina ventrosa, Mont.

Two rows of teeth are in each case shown on the left of the median tooth in their undisturbed position. On the right the teeth of a single row are drawn apart.

The remaining differences are best seen from the figures. The following brief descriptions, with approximate micromeasurements, of the radulæ of these two species are founded on several specimens of each.

## Paludestrina ventrosa.

Radula measuring  $60 \times 16 \mu$  and having 40-45 rows of seven teeth each.

Median (or rachidian) tooth  $(2.5 \mu \text{ in width})$  bears 7 cusps, of which the central one equals in length half the width of the crest of the tooth. Basal denticles one on each side, inconspicuous. The crest of the tooth viewed in its position in the radula is markedly concave.

Admedian tooth bears 9 cusps inclined inwards towards the median line of the whole radula; base prolonged outwards in a shank which reaches almost to the margin of the radula and which terminates in a thickened knob-like end.

Laterals long, slender, and curved, with numerous small cusps, which in the outer one are difficult to resolve. The inner lateral is more sharply curved at the point where the cusps cease; in the outer one the curve is far more symmetrical throughout.

Formula:  $\frac{M}{7} + \frac{1}{9} + \frac{2}{x}$ .

## Paludestrina Jenkinsi.

Radula measuring  $86-93 \times 20 \mu$  and having 60-70 rows of seven teeth each.

Median tooth bearing 9, or sometimes even 11, cusps, of which the central one is about one third the width of the crest. This last is less concave in outline than in *P. ventrosa*. Basal denticles four on either side, very conspicuous.

Admedian tooth bearing 9–11 cusps, inclined inwards, but slightly less so than in the preceding species; in other respects it is very similar.

Laterals long and slender, nearly straight in the shank, and sharply curved at the free end. Cusps numerous and easily visible.

Formula: 
$$\frac{M}{9-11} + \frac{1}{9-11} + \frac{2}{x}$$
.

LVII.—Observations on two rare British Nudibranchs (Lomanotus genei, Verany, and Haneockia eudactylota, Gosse). By F. W. GAMBLE, B.Sc., Assistant to the Beyer Professor of Zoology, Owens College, Manchester.

## [Plate XVII.]

WHILE working last summer at the Plymouth Laboratory of the Marine Biological Association I obtained a single specimen of each of these species during successive weeks from